



**Rules and Regulations
for the Construction and
Classification of Ships
for the Carriage of
Liquefied Gases in Bulk,
July 2008**

Notice No. 3

Effective Date of Latest
Amendments:

See page 1

Issue date: December 2008

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RULES AND REGULATIONS FOR THE CONSTRUCTION AND CLASSIFICATION OF SHIPS FOR THE CARRIAGE OF LIQUEFIED GASES IN BULK, *July 2008*

Notice No. 3

This Notice contains amendments within the following Sections of the *Rules and Regulations for the Construction of Ships for the Carriage of Liquefied Gases in Bulk, July 2008*. The amendments are effective on the dates shown:

Chapter	Section	Effective date
3	9	Corrigendum
7	4	1 January 2009

The *Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquefied Gases in Bulk, July 2008* are to be read in conjunction with this Notice No. 2. The status of the Rules is now:

Rules for Ships for Liquefied Gases	Effective date:	July 2008
Notice No. 1	Effective dates:	1 July 2008
Notice No. 2	Effective dates:	1 August 2008, 1 November 2008 & Corrigenda
Notice No. 3	Effective dates:	1 January 2009 & Corrigendum

All text which does not appear in the IGC Code is prefixed by 'LR' and thick vertical lines (see LR II.3)

Chapter 3

Chapter 3 Ship Arrangements

CORRIGENDUM

LR 3.9 **Ship structures**

General

LR 3.9-01 The scantlings and arrangements of the hull structure are to be in accordance with the appropriate Chapters of Parts 3 and 4 of the Rules for Ships, modified as indicated in the following paragraphs. References in LR 3.9-02 to ~~LR 3.9-34~~ **LR 3.9-42** are to the Rules for Ships unless stated otherwise.

Chapter 7

Cargo Pressure/Temperature Control

Effective date 1 January 2009

LR 7.4 Nitrogen/inert gas systems fitted for purposes other than inerting required by SOLAS Reg. II-2/4.5.5.1.1

LR 7.4-01 Where nitrogen gas is used for purposes other than inerting e.g. cargo padding, the following requirements are to be applied.

LR 7.4-02 The air compressor and the nitrogen generator may be installed in the engine room or in a separate compartment. A separate compartment is to be treated as one of 'other machinery spaces' with respect to fire protection.

LR 7.4-03 Where a separate compartment is provided, it is to be positioned outside the cargo area and is to be fitted with an independent mechanical extraction ventilation system providing at least 6 air changes per hour. The compartment is to have no direct access to accommodation spaces, service spaces and control stations, and is to be provided with oxygen level detection equipment with a low oxygen level alarm.

LR 7.4-04 The nitrogen generator is to be capable of delivering high purity nitrogen with oxygen content not exceeding 5 per cent by volume. The system is to be fitted with automatic means to discharge gas to the atmosphere during start-up and abnormal operation when predetermined limits are reached, see LR 7.4-13.1 to LR 7.4-13.5.

LR 7.4-05 A feed air treatment system is to be fitted to remove free water, particles and traces of oil from the compressed air, and to preserve the specification temperature.

LR 7.4-06 Where a nitrogen receiver/buffer tank is required to be fitted it may be installed in a dedicated compartment or in the separate compartment containing the air compressor and the generator or may be located in the cargo area. Where the nitrogen receiver/buffer tank is installed in an enclosed space, the access is to be arranged from the open deck only and the access door is to open outwards. Permanent ventilation and alarm arrangements are to be fitted as required by LR 7.4-03.

LR 7.4-07 The oxygen-enriched air from the nitrogen generator and the nitrogen-product enriched gas from the protective devices of the nitrogen receiver are to be arranged to discharge to a safe location on the open deck.

LR 7.4-08 In order to permit maintenance, means of isolation are to be fitted between the generator and the receiver.

LR 7.4-09 At least two non-return devices are to be fitted in the inert gas supply main, one of which is to be of the double block and bleed arrangement. The second non-return device is to be equipped with positive means of closure.

LR 7.4-10 Instrumentation is to be provided for continuously indicating the temperature and pressure of air:

- .1 at the discharge of the compressor,
- .2 at the inlet to the nitrogen generator.

LR 7.4-11 Instrumentation is to be fitted for continuously indicating and permanently recording the oxygen content of the inert gas downstream of the nitrogen generator when inert gas is being supplied.

LR 7.4-12 The instrumentation referred to in LR 7.4-11 is to be placed in the cargo control room where provided. Where no cargo control room is provided, the instrumentation is to be placed in a position easily accessible to the officer in charge of cargo operations.

LR 7.4-13 Audible and visual alarms are to be provided to indicate:

- .1 low feed-air pressure from compressor as referred to in LR 7.4-10.1,
- .2 high air temperature as referred to in LR 7.4-10.1,
- .3 high condensate level at automatic drain of water separator as referred to in paragraph LR 7.4-05,
- .4 failure of electrical heater, if fitted,
- .5 oxygen content in excess of that required in LR 7.4-04,
- .6 failure of power supply to the instrumentation as referred to in LR 7.4-11.

LR 7.4-14 Automatic shut-down of the system is to be arranged upon alarm conditions as required by LR 7.4-13.1 to LR 7.4-13.5.

LR 7.4-15 The alarms required by LR 7.4-13.1 to LR 7.4-13.6 are to be fitted in the machinery space and cargo control room, where provided, but in each case in such a position that they are immediately received by responsible members of the crew.

LR 7.4-16 Where the connections to the cargo tanks, to the hold spaces or to cargo piping are not permanent, the non-return devices required by LR 7.4-09 may be substituted by two non-return valves.

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Registered office
71 Fenchurch Street, London, EC3M 4BS
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